



**Verification and certification report form for
CDM project activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the project activity	Title: Institutional Improved Cook Stoves for Schools and Institutions in Uganda UNFCCC Ref. No.: 10345
Scale of the project activity	<input type="checkbox"/> Large-scale <input checked="" type="checkbox"/> Small-scale
Version number of the verification and certification report	02
Completion date of the verification and certification report	13/09/2019
Monitoring period number and duration of this monitoring period	01 Monitoring period: 01/03/2017 to 31/05/2019 (including both dates)
Version number of the monitoring report to which this report applies	03
Crediting period of the project activity corresponding to this monitoring period	01/03/2017 – 29/02/2024 (Renewable)
Project participants	Simoshi Limited
Host Party	Uganda
Applied methodologies and standardized baselines	Applied methodology: AMS-II.G. (Energy efficiency measures in thermal applications of non-renewable biomass), Version 8.0 Standardized baseline: ASB0016 Standardised baseline “Institutional Cook Stoves in Uganda”, version 01.0
Mandatory sectoral scopes	03- Energy Demand
Conditional sectoral scopes, if applicable	N/A
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	55,997 tCO ₂ e
Certified amount of GHG emission reductions or GHG removals for this monitoring period	8,457 tCO ₂ e
Name and UNFCCC reference number of the DOE	Name: KBS Certification Services Pvt. Ltd UNFCCC reference number: E-0051
Name, position and signature of the approver of the verification and certification report	 Kaushal Goyal

	Managing Director
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SECTION A. Executive summary

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KBS has been commissioned by “Simoshi Limited” to perform an independent periodic verification of its registered project “Institutional Improved Cook Stoves for Schools and Institutions in Uganda” (UNFCCC Ref. No. 10345) for the reported GHG emission reductions for the given 1st monitoring period 01/03/2017 to 31/05/2019 (both dates included). The CDM projects must undergo independent third party verification and certification of emission reductions as the basis for issuance of Certified Emission Reductions (CERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- Monitoring report and other supporting documents are complete;
- The actual monitoring systems & procedures and monitoring report conforms with the requirements of the registered monitoring plan and the approved monitoring methodology;
- The data is recorded and stored as per the monitoring methodology and registered monitoring plan.

Scope:

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on review of monitoring report, supporting information and

- a) The registered PDD, including the monitoring plan and the corresponding validation opinion(s);
- b) Previous verification reports, deviation requests, requests for revision of monitoring plan (if applicable);
- c) Monitoring report for the monitoring period under verification including CER calculations sheets and all supporting documents;
- d) The applied monitoring methodology;
- e) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- f) All information and references relevant to the project activity's resulting in emission reductions
- g) The project is assessed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance.

KBS has, based on the recommendations in the latest version of CDM Validation and Verification Standard for project activity, employed a rule-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

Description of project:

The purpose of this project activity is the dissemination of institutional improved cook stoves (IICS) in schools and institutions in Uganda. The IICS disseminated are manufactured by Uganda Stove Manufacturers Limited (Ugastove). The model is the portable rocket firewood IICS of different sizes that meet the minimum thermal efficiency requirement of 20%. The different IICS sizes are conditioned by the saucepan capacity and range from 30 litres and up to 450 litres.

These IICS are more efficient in transferring heat to the cooking pots, thus requiring less fuel to prepare the same meal. This efficiency is translated into fuel savings compared to traditional stoves used in Uganda. By reducing fuel consumption, the project activity reduces greenhouse gas

emissions from the use of fuel. This reduction in fuel consumption is estimated and corresponding CO₂ emission reductions are calculated from these savings.

The project boundary of this project includes whole Republic of Uganda (Uganda) including its 111 districts and the city of Kampala.

Methodology

KBS follows a rule based verification approach, wherein, as a first step, the contract review is undertaken as per latest version of CDM Accreditation Standard. Subsequently, after the contract is signed, the monitoring report of the project activity is made publicly available at UNFCCC website as per CDM procedures. A desk review of the project documentation is undertaken, which is followed by an onsite visit by the members of verification team in accordance with the latest version of CDM AS. The verification protocol is filled by the verification team that is based on standard auditing practices and version 02 of CDM VVS for project activities, to capture the assessment of applicable CDM requirements viz., version 02 of CDM Project Standard for project activities, registered PDD, applied methodology, applied standardized baseline and/or tools and recent decisions. The verification protocol provides transparent means to record the observations and compliances by the verification team members and the nonconformities, if any. The verification protocol is an internal document, and is available on request. Following are the major milestones for the verification under consideration.

Verification contract	13/05/2019
Publication of MR	02/07/2019
On site verification	30/07/2019 to 01/08/2019
Draft Verification Report	28/08/2019
Final Verification Report	13/09/2019

KBS Certification Services Pvt. Ltd. confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements.

Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 8,457 tCO₂e (round down) emission reductions during period 01/03/2017 to 31/05/2019 (Including both the days).

SECTION B. Verification team, technical reviewer and approver**B.1. Verification team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader, Technical Expert (TA 3.1)	IR	Sharma	Chetan Swaroop	Central Office	✓	✓	✓	✓
2.	Local Expert	EI	Veronica	Namazzi Gloria	Central office	✓	✓	✓	

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical Reviewer (TA 3.1)	IR	Badaya	Rohit	Central office
2.	Manager (Technical & Certification)	IR	Badaya	Rohit	Central office
3.	Authorizer	IR	Goyal	Kaushal	Central office

SECTION C. Application of materiality**C.1. Consideration of materiality in planning the verification**

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	The IICS/Institutions registration is done through sales agreement. Error can be perceived during registration by PP and during transfer of data from paper to ER sheet by PP.	Medium	PP collects the IICS/Institutions registration data and transfer to ER sheet. Error can be perceived during registration by PP and during transfer of data from paper to ER sheet by PP.	To mitigate the risk, Verification team has checked the IICS/institutions registration data in the ER sheet /04/ through the on-site acceptance sampling of the IICS/institutions and from the registration records /10/. The registration data was found consistent. Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk.
2.	Monitoring parameters are monitored by PP and errors can be perceived during the information transfer from monitoring forms to the emission reduction sheet.	High	There are multiple monitoring parameters (As per section B.7.1 of the registered PDD) which are directly used for the baseline emission	1. To mitigate the risk, DOE has checked the monitoring data for 5 applicable monitoring parameters (as given below) through acceptance sampling.

			<p>calculation.</p> <p>The data monitoring for these monitoring parameters is done by PP and errors can be perceived during the information transfer from monitoring forms to the emission reduction sheet.</p>	<p>Monitoring parameters:</p> <ol style="list-style-type: none"> 1. $t_{fraction\ i}$ 2. Date of commissioning of project device i 3. $N_{y,inst}$ 4. μ_y 5. $U_{y,inst}$ <p>For all the selected samples, the monitoring data (for the 5 monitoring parameters) has been checked by DOE from the on-site visit data/interview /observation, monitoring forms /10/, /11/, /12/ and the ER sheet /04/. The data was found consistent.</p> <p>Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk.</p> <p>2. To mitigate the risk, DOE has checked the monitoring data for 1 applicable monitoring parameter (as given below) through on-site visit of 12 schools/IICS, all the WBT monitoring data for 12 IICS /09/ and the ER sheet /04/. The data was found consistent.</p> <p>Monitoring parameters:</p> <ol style="list-style-type: none"> 1. $\eta_{new,i,j}$ <p>Further verification team has also checked the ER calculation sheet /04/ thoroughly to mitigate the risk.</p>
3.	Errors can be perceived during the information transfer (Ex-ante parameters) from registered PDD to the emission reduction sheet.	Medium	<p>There are multiple ex-ante parameters in the Monitoring report which are used for the Baseline GHG emission calculation. Errors can be perceived during the information transfer (Ex-ante parameters) from registered PDD to the emission reduction sheet.</p>	<p>To mitigate the risk, verification team has checked all the Ex-ante parameters under the ER sheet /04/ with the monitoring report /02/ and PDD /25/ and found consistent.</p>

C.2. Consideration of materiality in conducting the verification

>> The prescribed thresholds for materiality, as per §330 of “CDM validation and verification standard for project activities” Version 02.0/27/.

Prescribed range of	500,000+	300,000+ to	300,000	SSC Pas	MSC PAs
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ERs/annum		500,000			
Prescribed Threshold	0.5%	1.0%	2.0%	5.0%	10.0%

The identified/selected materiality threshold for the project activity under current monitoring period is 5.0% as the project activity is a small-scale project activity.

	MR Version (Draft) /01/	MR Version (Final) /02/
Emission reductions	8,823 tCO ₂ e	8,457 tCO ₂ e
Identified Threshold	5.0%	5.0%

During the verification, the emission reduction has been decreased because of the raised CL-05, CAR-04 and CAR-05. Refer Appendix 4 of this report for more details.

SECTION D. Means of verification

D.1. Desk/document review

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A desk review is undertaken, involving but not limited to,

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The list of documents reviewed is included in the section 'Appendix 3' of this report.

D.2. On-site inspection

Duration of on-site inspection: 30/07/2019 to 01/08/2019				
No.	Activity performed on-site	Site location	Date	Team member
1.	Implementation and Operation of the CDM project activity based on registered Monitoring Plan and physical features of the project activity as per registered PDD	Project sites in Uganda. Visit to sample schools, Warehouses, Technology supplier, monitoring person etc. in Uganda.	30/07/2019 to 01/08/2019	Mr. Chetan Swaroop Sharma (Team Leader, Technical Expert (TA 3.1)) Ms. Namazzi Gloria Veronica (Local Expert)
2.	Information flows for generating, aggregating and reporting the monitoring parameters			
3.	a cross-check between information provided in the MR and data from other sources.			
4.	Competency of the operating personnel, monitoring personnel and calibrating agencies			
5.	Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan.			
6.	Calibration performance and monitoring practices followed for monitoring equipment's used in the project activity			
7.	Quality Control and Quality Assurance procedures against the approved			

	monitoring plan			
8.	Calculation and assumptions made in determining the GHG data and emission reductions			
9.	Compliance with CDM criterion and relevant guidance with respect to monitoring plan			
10.	Level of accuracy (Materiality) of the monitoring activity			

D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Echavarria	Virginia	Managing Director, Simoshi Limited	30/07/2019 to 01/08/2019	General aspects of the project, Changes since validation, Quality management system, Monitoring data management, Data analysis, Implementation of the monitoring plan, GHG emission reduction calculation, Involved personnel and responsibilities, Training and practice of the operational personnel, Monitoring data management, Maintenance, Sales/Distribution records, Survey records, Qualification	Mr. Chetan Swaroop Sharma (Team Leader, Technical Expert (TA 3.1))
2.	Wakoli	Peter	Consultant, Omni-Tech	31/07/2019		
3.	Ahmed	Mugwanza	Operations Manager, Ugastove	31/07/2019		Ms. Namazzi Gloria Veronica (Local Expert)
4.	Uthuman	Mubwuke	Operation, Ugastove	31/07/2019		
5.	Vivian	Namaala	Accountant, Simoshi Limited	01/08/2019		
6.	Mathew	Obbo	Driver, Simoshi Limited	01/08/2019		

Institutions/IICS checked during on-site visit by DOE for the monitoring parameter ($\eta_{new,i,j}$):

S. No.	SCHOOL NAME	STOVE SERIAL NUMBER (Stove Record)
1	Bbira Primary School	SL0000060
2	Bukasa Primary School	SL0000069
3	Busega Community Primary School	SL0000120
4	City Junior School	SL0000044
5		SL0000103
6	Kitebi Secondary School	SL0000054
7	Mbuya College School	SL0000036
8	Namungoona Kigobe Primary School	SL0000088
9		SL0000089
10	Ntinda Primary School	SL0000066
11	St. Charles Lwanga	SL0000102

12	St. Paul Buloba	SL0000104
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Institutions sampled during on-site visit by DOE for the monitoring parameters ($t_{fraction\ i}$, Date of commissioning of project device i , $N_{y,inst}$, μ_y , $U_{y,inst}$):

S. No.	SCHOOL NAME
1	Bbira Primary School
2	Bukasa Primary School
3	Busega Community Primary School
4	Cornerstone Parents School
5	Gangu Muslim
6	Ggaba Demonstration School
7	Kabowa Primary School
8	Kamwokya Primary School
9	Kawemba Preparatory School
10	Kisasi Primary School
11	Kitebi Secondary School
12	Kyaggwe Road Primary School
13	Masajja Umea Primary School
14	Nakivubo Blue Primary School
15	Namungoona Kigobe Primary School
16	Ntinda Primary School
17	St. Paul Buloba
18	St. Pius Masajja Primary School

D.4. Sampling approach

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There are total 5 monitoring parameters (as given below) for which sampling has been done by the DOE.

1. $t_{fraction\ i}$
2. Date of commissioning of project device i
3. $N_{y,inst}$
4. μ_y
5. $U_{y,inst}$

DOE had planned to apply the acceptance sampling in accordance with the paragraph 54 of the "Guideline: Sampling and surveys for CDM project activities and programmes of activities, version 04.0". KBS verification team carried out the random sampling from the PP's records and check (using its professional judgment) the acceptability of the data for each record in the PP's sample records against DOE records i.e. Data collected by the DOE. The DOE has determined acceptance sample size based on the "Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activities and programmes of activities" version 07.0.

During the on-site verification a sampling approach has been used by the verification team to verify the reported values for the monitored parameters (5 monitoring parameters as given above) as listed in section D.2 of the MR.

For the determination of DOE's acceptance sample size, verification team has selected the following using its professional judgment:

1. Acceptable quality level (AQL) - 1%
2. Unacceptable Quality Level (UQL) – 20%

3. Producer risk -10%

4. Consumer risk -10%

Verification team has determined acceptance sample size for all the monitoring parameters based on the "Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activities and programmes of activities" version 07.0. From the above factors, the verification team determined the minimum sample size (n) as 18 and acceptance number (c) as 1. The sample size used to verify the reported values for the monitored parameters which are determined through monitoring by PP. The DOE interviewed the schools representative and filled the DOE survey form to check the acceptability of the data for each PP's records. Verification team shared the samples with PP during on-site visit.

The actual number of sample size where the acceptance survey was done is given below:

Parameters	Total Population	Acceptance sample size	Acceptance Number	Sampling method used
5 Monitoring parameters as per section D.2 of the MR 1. $t_{fraction i}$ 2. Date of commissioning of project device i 3. $N_{y,inst}$ 4. μ_y 5. $U_{y,inst}$	Total Institutions: 49	18	1	Acceptance Sampling based on random selection of schools.

Using acceptance sampling approach, verification team checked the PP's Institution/IICS results (reported in the Monitoring forms) along with the following evidences:

1. On- site inspection/interview
2. Sales agreement /10/, Term Information Update /11/ and Kitchen Information Update /12/.
3. Database of all project participating schools/IICS as per the ER sheet /04/

The result of the survey is given below:

Parameters	DOE Sample size	No of PP's record beyond unacceptable level	Accepted
Monitoring parameters as per E.2 of the MR	18	0	18

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	01	03	00
Compliance of the project implementation and operation with the registered PDD	02	00	00
Post-registration changes	00	00	00
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	00	00	00
Compliance of monitoring activities with the registered monitoring plan	02	02	00
Compliance with the calibration frequency requirements for measuring instruments	00	00	00

Assessment of data and calculation of emission reductions or net removals	00	00	00
Assessment of reported sustainable development co-benefits	00	00	00
Global stakeholder consultation	00	00	00
Others (please specify)	00	00	00
Total	05	05	00

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	Verification team checked the monitoring report /02/ with “Instructions for filling out the monitoring report form” mentioned as attachment to Monitoring report form (version 07).
Findings	CL-01, CAR-01, CAR-02 and CAR-03 have been raised in this regard and successfully closed. Refer Appendix 4 of this report for more details.
Conclusion	In accordance with §352 of CDM validation and verification standard for project activities, Version 02.0 /27/, verification team confirms that final monitoring report /02/ is completed using the latest valid version of the applicable monitoring report form /32/.

E.2. Remaining forward action requests from validation and/or previous verifications

>> The current verification is for the first monitoring period of the project activity. All raised CARs and CLs were successfully closed during validation. There is no pending FAR from validation to be addressed during the 1st verification.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	<p>The purpose of this project activity is the dissemination of institutional improved cook stoves (IICS) in schools and institutions in Uganda. All the IICS disseminated under the project activity are manufactured by Uganda Stove Manufacturers Limited (Ugastove). The model is the portable rocket firewood IICS of different sizes that meet the minimum thermal efficiency requirement of 20%. The Ugastove rocket-stove design is portable IICS, it includes a chimney provision, and has a single saucepan provision with capacities that range from 30 litres up to 450 litres capacity. All the IICS have a unique number. The same is verified during the on-site visit, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/ and ER sheet /04/. Verification team confirms that the IICS distributed to schools under the project activity (till the end of this monitoring period) are in compliance with the PDD /25/.</p> <p>Verification team has also interviewed representative of UGASTOVE to understand the IICS manufacturing process, QMS of UGASTOVE, Stove design and similarity between different size of Saucepans (starting from 30 L to 450 L), Health & Safety aspects taken during the IICS manufacturing.</p> <p>PP has opted to carry out WBTs on 30 litres IICS capacity (3 test for each IICS and considered lowest) and apply conservatively the resulted thermal efficiency across all IICS sizes.¹ The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable.</p> <p>All the stoves distributed under the project activity are from the same manufacturer i.e. Ugastove. Verification team based on review of IICS Quality Assurance Control Manual /16/, interview with Ugastove and on-site physical inspection of Ugastove IICS model (of 30 L saucepan capacity and above) confirms that the design (e.g.</p>
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¹ This is in line with the response given from the SSG WG to Request for Clarification SSC_725.

with respect to insulation, placement of grate, cooking vessel and if applicable chimney) of all Ugastove IICS remain the same irrespective of the size and thus using the value of efficiency test of 30 L saucepan to higher size is justified inline with the requirements of SSWG 725.

Based on the on-site interview, IICS Maintenance Manual /20/ and maintenance sheet /18/, verification team confirms that all Ugastove IICS have comparable repair and maintenance practices on all project stoves, irrespective of the size.

PP has taken the census approach and all 12 disseminated IICS of 30 litres capacity from the first batch were tested (by PP) following the WBT version 4.2.3 /22/, with three tests conducted on every IICS which is in compliance with the SSC_725 clarification /34/ and sentence *"PP will carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes. The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. The thermal efficiency of IICS with 30 litres saucepan capacity in the first batch would be used for annual efficiency monitoring as specified in option (c) of paragraph 25 and the result would be applied across all IICS sizes."* under section B.7 of the registered PDD /25/. PP has taken all 12 disseminated IICS of 30 litres capacity from the first batch and conducted three WBT tests on every IICS. The most conservative value among the results of efficiency tests conducted (i.e. the least efficiency determined) were applied conservatively to all the stoves which is accepted to the verification team. CL-04 (2) has been raised in this respect and successfully closed. Refer Appendix 4 of this report for more details.

All the 12 WBT tests have been done by PP. Verification team based on review of IICS Quality Assurance_Control Manual /16/, IICS material testing results /19/ and interview with representative of Ugastove confirms that the stove manufacturer i.e. Ugastove has a quality management system in place (e.g. proven stove design is employed and materials of high quality and consistency are used for the production of stoves and quality of the input material and critical dimensions of the produced stoves are tested). This is inline with the requirements of SSWG CL 726 and thus WBT carried out by PP is acceptable to the verification team.

DOE has checked the monitored data through on-site visit interview of institutions, all the WBT monitoring data for 12 IICS /09/ and the ER sheet /04/. The data was found consistent. Average efficiency of the 12 IICS (27.36%) has been considered for the ER calculation /04/ which is accepted to the verification team. Verification team has also verified from the on-site interview from the institutions that that the WBT test /09/ was done during the holiday period.

Verification team has also checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) used during the WBT. Verification team has checked the monitoring equipments during the on-site visit. WBT test for IICS efficiency was done from 09/05/2019 to 27/05/2019 as checked from the WBT test records /09/. As verified from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test which is accepted to the verification team. As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of Standards which is a government agency and hence accepted to the verification team.

As verified by the verification team during the on-site visit sampling, Sales agreement /10/ and from the ER sheet /04/, all the IICS have been distributed only in schools (till the end date of this monitoring period).

Till the end of this monitoring period, total 49 schools were enrolled in the project

	<p>and the calculation of the actual number of pupils enrolled and staff (teachers and non-teachers) in the school is based on the actual data of these 49 Schools as recorded in the document Term Information Update /11/.</p> <p>Simoshi Limited (Simoshi) is the project participant of this project activity. The on-going support Simoshi provides to all schools includes continuous monitoring and training of kitchen staff, annual free maintenance for all IICS. Verification team has verified the same from the review of various documents /13/, /15/, /18/. The monitoring staff of the Simoshi is competent as verified during on site interview and also from the training documents /13/.</p> <p>When purchasing the IICS, the school/institution filled a sales agreement with Simoshi that contains, among others, information about the IICS model, price and payment, the name, location/address and phone number of the school/institution. This information allows the identification and the monitoring of the IICS and its usage. By filling the sales agreement, the school/institution has agreed to discontinue the use of the traditional stove, and to use the IICS instead. By signing the sales agreement, the school/institution was aware of and willing to give up its rights on emission reductions and transfer all carbon rights to Simoshi. Verification team has verified the same during the on-site visit sampling, Sales agreement /10/.</p> <p>The size of each IICS distributed under the project till the end of this monitoring period was checked and found within 5% of the small scale threshold 180 GWh_{th}/year. As per the calculation provide under the tab “Debundling and Additionality” of ER sheet /04/, verification team confirms that size of each unit (IICS) is within 5% of the small-scale threshold 180 GWh_{th}/year which is in compliance of the registered PDD /25/ and the additionality of the project activity is secured.</p> <p>According to the tab “SSC threshold” of the ER sheet /04/, the actual number of school added under the project activity are lower than the allowed maximum no of schools (Calculated as per small-scale threshold 180 GWh_{th}/year). Hence the project activity is within the small-scale threshold i.e. aggregated thermal energy savings has not exceeded 180 GWh_{th}/year during this monitoring period.</p> <p>Verification team has checked the life time of the project IICS from the technical document from the manufacturer /08/ which is 10 years. Project IICS are operating well as verified during the sample on-site visit and also from the document /18/.</p> <p>The verification team determined the conformity of the actual project activity and its operation with the registered project design document /25/. Verification team has, by means of a desk review and an on-site visit, assessed that all physical features of the CDM project activity proposed in the registered PDD /25/ are in place, and that the project participants have operated the CDM project activity as per the registered PDD /25/.</p> <p>The verification team has checked the information in the monitoring report /02/ and compared against the registered PDD /25/ and found consistent.</p> <p>During the onsite inspection, the verification team has checked the project locations, implementation, technology applied, project equipment, and monitoring system against the information in the registered PDD /25/.</p>
Findings	CL-02 and CL-03 have been raised in this regard and successfully closed. Refer Appendix 4 of this report for more details.
Conclusion	<p>The verification team, based on the site visit and document review, was able to conclude that the project activity has been commissioned and implemented as per the registered PDD /25/ and that all physical features of the project are in place.</p> <p>As per para 354 and 355 of CDM VVS for project activity version 02.0 /27/, the verification team confirms that:</p> <ol style="list-style-type: none"> The project activity is implemented as per the registered PDD /25/. The actual operation of the proposed CDM project activity is in line to the registered PDD /25/. It has reviewed the registered PDD /25/ including the monitoring plan, the

	applied monitoring methodology, relevant decisions from the CMP and the CDM EB and found that the Final MR /02/ for this monitoring period is in line with all the above mentioned documents.
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E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents²

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For the monitoring parameter " $\eta_{new,ij}$ ", the monitoring frequency is "Annually" as per registered monitoring plan /25/ however same was not followed during this monitoring period. CL-04 (4) has been raised in this respect and successfully closed. Refer Appendix 4 of this report for more details. PP has done WBT for the efficiency in May 2019 which is the most recent value for the selected monitoring period 01/03/2017 - 31/05/2019 and applied across all the IICS population. Since there is efficiency loss with time, measuring the efficiency in May 2019 will be lowest for the selected monitoring period 01/03/2017 - 31/05/2019 and conservative. Temporary deviation has been applied for the same by the PP and section B.2.1 of the Monitoring Report /02/ has been filled accordingly. The annual monitoring for the monitoring parameter " $\eta_{new,ij}$ " was not done during this monitoring period, hence as an alternative approach latest efficiency measurement results (May 2019) results has been applied for the ER calculation which is conservative and hence accepted to the verification team.

E.4.2. Corrections

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There is no correction to be submitted with this request for issuance. Therefore, this section is not applicable.

E.4.3. Changes to the start date of the crediting period

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There is no change to the start date of the crediting period in this monitoring period.

E.4.4. Inclusion of a monitoring plan

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There is no inclusion of a monitoring plan to the registered project activity that was not included at registration. Hence, this section is not applicable.

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

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There is no permanent changes to be submitted with this request for issuance. Therefore, this section is not applicable.

E.4.6. Changes to the project design

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There is no changes to the project design to be submitted with this request for issuance. Therefore, this section is not applicable.

E.4.7. Changes specific to afforestation and reforestation project activities

>>This section is not applicable.

² Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied (selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	<p>The verification team checked compliance of project monitoring plan /25/ with the applied methodology (AMS-II.G., version 08) /23/, Standardized Baseline: ASB0016 'Institutional Cook Stoves in Uganda', Version 01.0 /37/ and including applicable tools.</p> <p>The actual procedures followed for monitoring of parameters are checked against the parameters and procedures provided in the applied methodology /23/.</p> <p>All parameters used for emission reductions calculation have been verified. The discussion regarding each parameter has been elaborated in the further sections of this report.</p> <table border="1" data-bbox="472 595 1441 1823"> <thead> <tr> <th data-bbox="472 595 954 689">Applicability criteria as per applied methodology i.e. AMS-II.G., version 08</th><th data-bbox="963 595 1441 689">Means of Verification</th></tr> </thead> <tbody> <tr> <td data-bbox="472 689 954 1149"> <p>Requirement as per para 2 of the applied methodology:</p> <p>This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.</p> </td><td data-bbox="963 689 1441 1149"> <p>Verification team confirms that project activity has disseminated high efficiency firewood institutional improved cook stoves (IICS) in schools in Uganda, hence this applicability criterion is met.</p> <p>The same is verified during the on-site visit, technical specification of the distributed IICS /07/, provided efficiency test reports of project IICS /09/.</p> </td></tr> <tr> <td data-bbox="472 1149 954 1451"> <p>Requirement as per para 3 of the applied methodology:</p> <p>In the case of cook stoves, the methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with rated efficiency of at least 20 per cent.</p> </td><td data-bbox="963 1149 1441 1451"> <p>The IICS distributed under the project activity are single pot and portable as verified during the on-site visit, technical specification of the distributed IICS /07/. 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Hence the project activity is within the small-scale threshold i.e. aggregated thermal energy savings has not exceeded 180 GWh_{th}/year during this monitoring period.</p> </td></tr> </tbody> </table>	Applicability criteria as per applied methodology i.e. AMS-II.G., version 08	Means of Verification	<p>Requirement as per para 2 of the applied methodology:</p> <p>This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. 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Findings	No CAR/CL is raised.								
Conclusion	<p>The verification team was able to confirm that the monitoring plan contained in registered PDD /25/ and MR /02/ is in accordance with the approved small scale methodology applied for the project activity i.e. "AMS-II.G. ver. 8 - Energy efficiency measures in thermal applications of non-renewable biomass" /23/ and Standardized Baseline: ASB0016 'Institutional Cook Stoves in Uganda', Version 01.0 /37/.</p>								

	As per para 357 and 358 of CDM VVS for project activity version 02.0 /27/, In the opinion of the verification team the monitoring plan of the registered PDD /25/ complies with the monitoring requirement of the applied approved small scale methodology "AMS-II.G. ver. 8 - Energy efficiency measures in thermal applications of non-renewable biomass" /23/ and Standardized Baseline: ASB0016 'Institutional Cook Stoves in Uganda', Version 01.0 /37/ in the context of the project activity.
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E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	The verification team has checked the ex-ante parameters and data stated in Section D.1 of MR /02/ and compared with section B.6.2 of the registered PDD /25/ whether all parameters fixed ex-ante for the crediting period have been applied correctly.		
	Ex-ante Parameter, Unit, Description	Value applied and source	Verification of the source:
	B_{old,p} Unit: Tonnes /person /year Description: Annual quantity of woody biomass that would have been used per person in the school /institution in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices	Boarding school- 0.38 Day school- 0.19 Prison, plantation estates and hospitals- 0.59 Source: Standardized baseline ASB0016 'Institutional cook stoves in Uganda', version 01.0	The values were fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission calculation.
	f_{NRB,y} Unit: Fraction Description: Fraction of woody biomass saved by the project activity in the year y that can be established as non-renewable biomass	0.82 Fraction Source: Default values as per https://cdm.unfccc.int/DNA/fNRB/index.html	The value was fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission calculation.
	NCV biomass Unit: TJ/tonne Description: Net calorific value of the non-renewable woody biomass that is substituted	0.0156 TJ/tonne Source: IPCC default 2006 (volume 2, chapter 1, Table 1.2)	The value was fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission calculation.
	EF_{projected fossil-fuel} Unit: tCO ₂ /TJ Description: Emission factor for the substitution of non-renewable woody	81.6 tCO ₂ /TJ Source: Default value in accordance with paragraph 15 of AMS-II.G (version 08)	The value was fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission

	biomass by similar consumers		calculation.
	LEy Unit: Factor Description: Net to gross adjustment factor to account for leakage	0.95 Source: AMS-II.G (version 08), paragraph 32	The value was fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission calculation.
	η_{old} Unit: Fraction Description: Efficiency of the baseline appliance being replaced	0.12 Source: Default value according to the Standardised Baseline, ASB0016: Institutional Cook Stoves in Uganda (version 01.0)	The value was fixed at the time of validation of PDD /25/. The values have been correctly taken as per the registered PDD /25/ and Hence accepted by the verification team. This is used for Baseline emission calculation.
Findings	No CARs/CLs raised.		
Conclusion	As per para 360 to 361 of CDM VVS for project activity version 02.0 /27/, the verification team confirm that the value of the Ex-ante parameters (Fixed ex-ante for the 1 st crediting period) used for calculation of emission reduction are consistent with registered PDD /25/ and correctly applied in MR /02/ and emission reduction spread sheet /04/ and justified.		

E.6.2. Data and parameters monitored

Means of verification	Verification team confirms through on-site verification and from the document review, the actual monitoring system complies with the monitoring plan mentioned in the registered PDD /25/.				
	During the verification, the monitoring parameters of the registered monitoring plan /25/ have been verified with regard to the appropriateness of the verification method; the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. The monitoring parameters have been measured / determined without material misstatements and is in line with all applicable standards and relevant requirements.				
	The assessment for the monitoring parameters is given below:				
	<table><tr><th>S. No.</th><th>Ex-post parameters, Verification opinion of the verification team</th></tr><tr><td>1</td><td><p>Data/Parameter: $\eta_{new,i,j}$</p><p>Unit: Fraction</p><p>Description: Efficiency of the IICS of each type i and batch j being deployed as part of the project activity</p><p>Value(s) of monitored parameter: PP has opted to carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes.³ The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable.</p><p>All the stoves distributed under the project activity are from the same manufacturer i.e. Ugastove. Verification team based on review of IICS Quality Assurance Control Manual /16/. interview with Ugastove and on-site physical inspection of Ugastove IICS</p></td></tr></table>		S. No.	Ex-post parameters, Verification opinion of the verification team	1
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³ This is in line with the response given from the SSG WG to Request for Clarification SSC_725.

model (of 30 L saucepan capacity and above) confirms that the design (e.g. with respect to insulation, placement of grate, cooking vessel and if applicable chimney) of all Ugastove IICS remain the same irrespective of the size and thus using the value of efficiency test of 30 L saucepan to higher size is justified inline with the requirements of SSWG 725.

Based on the on-site interview, IICS Maintenance Manual /20/ and maintenance sheet /18/, verification team confirms that all Ugastove IICS have comparable repair and maintenance practices on all project stoves, irrespective of the size.

PP has taken the census approach and all 12 disseminated IICS of 30 litres capacity from the first batch were tested (by PP) following the WBT version 4.2.3 /22/, with three tests conducted on every IICS which is in compliance with the SSC_725 clarification /34/ and sentence "PP will carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes. The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. The thermal efficiency of IICS with 30 litres saucepan capacity in the first batch would be used for annual efficiency monitoring as specified in option (c) of paragraph 25 and the result would be applied across all IICS sizes." under section B.7 of the registered PDD /25/. PP has taken all 12 disseminated IICS of 30 litres capacity from the first batch and conducted three WBT tests on every IICS. The most conservative value among the results of efficiency tests conducted (i.e. the least efficiency determined) were applied conservatively to all the stoves which is accepted to the verification team. CL-04 (2) has been raised in this respect and successfully closed. Refer Appendix 4 of this report for more details.

Verification team has also checked the WBT monitoring data for 12 IICS /09/ with respect to achieved precision. This is a mean value parameter. From the Sample size calculator /38/, verification team has found that 90/10 has been met which is in compliance with the monitoring plan /25/.

All the 12 WBT tests have been done by PP. Verification team based on review of IICS Quality Assurance_Control Manual /16/, IICS material testing results /19/ and interview with representative of Ugastove confirms that the stove manufacturer i.e. Ugastove has a quality management system in place (e.g. proven stove design is employed and materials of high quality and consistency are used for the production of stoves and quality of the input material and critical dimensions of the produced stoves are tested). This is inline with the requirements of SSWG CL 726 and thus WBT carried out by PP is acceptable to the verification team.

DOE has checked the monitored data through on-site visit interview of all the 12 institutions/IICS, all the WBT monitoring data for 12 IICS /09/ and the ER sheet /04/. The data was found consistent.

Average efficiency of the 12 IICS has been considered for the ER calculation /04/ which is accepted to the verification team.

Verification team has also verified from the on-site interview from the institutions that that the WBT test /09/ was done during the holiday period.

Test	Result
Test 1 SL0000036	21
Test 2 SL0000044	30.67
Test 3 SL0000054	25.67
Test 4 SL0000060	29.33
Test 5 SL0000066	23.67
Test 6 SL0000104	31
Test 7 SL0000088	28.67
Test 8 SL0000102	30.33
Test 9 SL0000103	33.33

Test 10 SL0000120	29.33
Test 11 SL0000089	24.67
Test 12 SL0000069	20.67
Average	27.36%

Measuring/reporting frequency: Annually as per registered monitoring plan /25/ however same was not followed during this monitoring period. CL-04 (4) has been raised in this respect and successfully closed. Refer Appendix 4 of this report for more details. PP has done WBT for the efficiency in May 2019 which is the most recent value for the selected monitoring period 01/03/2017 - 31/05/2019 and applied across all the IICS population. Since there is efficiency loss with time, measuring the efficiency in May 2019 will be lowest for the selected monitoring period 01/03/2017 - 31/05/2019 and conservative. Temporary deviation has been applied for the same by the PP and section B.2.1 of the Monitoring Report /02/ has been filled accordingly.

The annual monitoring for the monitoring parameter " $\eta_{new,i,j}$ " was not done during this monitoring period, hence as an alternative approach latest efficiency measurement results (May 2019) results has been applied for the ER calculation which is conservative and hence accepted to the verification team.

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): No, Temporary deviation has been applied for the same by the PP and section B.2.1 of the Monitoring Report /02/ has been filled accordingly.

Type of monitoring equipment: The monitoring equipments used during the WBT test are given below. Verification team has checked the monitoring equipments during the on-site visit.

	Weighing scale
Type	TCS
Accuracy class	150 kg capacity by 0.01 kg
Calibration date	07/05/2019
Calibration entity	UNBS
Certificate number	01190664
Serial number	66286
Calibration frequency	Before annual monitoring

	Digital thermometer
Type	SL-DTH01 Model 2000
Accuracy class	-200° C to 1372° C by 0.1° C
Calibration date	06/05/2019
Calibration entity	UNBS
Certificate number	0219410
Serial number	SL-DTH01
Calibration frequency	Before annual monitoring

	Moisture meter
Type	Extech M050 SL-MM1
Accuracy class	5 – 50%
Calibration date	07/05/2019
Calibration entity	UNBS
Certificate number	0619298
Serial number	SL-MM1
Calibration frequency	Before annual monitoring

Is accuracy of the monitoring equipment as stated in the PDD?: No accuracy has been defined in the registered PDD /25/. The accuracy of the instruments is as per the industry standard and hence accepted.

Calibration frequency /interval: WBT test for IICS efficiency was done from

	<p>09/05/2019 to 27/05/2019 as checked from the WBT test records /09/. As verified from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test which is accepted to the verification team.</p> <p>Is the calibration interval in line with the monitoring plan of the PDD?: Calibration frequency of the monitoring instruments has not been defined in the monitoring plan /25/. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test (from 09/05/2019 to 27/05/2019) which is accepted to the verification team</p> <p>Company performing the calibration: As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of Standards which is a government agency and hence accepted to the verification team.</p> <p>Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Verification team has checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) and found the instruments functioning properly.</p> <p>Is (are) calibration(s) valid for the whole reporting period?: Not applicable as the monitoring instruments are only used during the WBT test which was done from 09/05/2019 to 27/05/2019. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test (from 09/05/2019 to 27/05/2019) which is accepted to the verification team.</p> <p>If applicable, has the reported data been cross-checked with other available data?: Not applicable</p> <p>How were the values in the monitoring report verified?: DOE has checked the monitored data through on-site visit interview of institutions, all the WBT monitoring data for 12 IICS /09/ and the ER sheet /04/. The data was found consistent.</p> <p>Average efficiency of the 12 IICS has been considered for the ER calculation /04/ which is accepted to the verification team.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: The annual monitoring for the monitoring parameter "$\eta_{new,i,j}$" was not done during this monitoring period, hence as an alternative approach latest efficiency measurement results (May 2019) results has been applied for the ER calculation which is conservative and hence accepted to the verification team. Temporary deviation has been applied for the same by the PP and section B.2.1 of the Monitoring Report /02/ has been filled accordingly.</p>
2	<p>Data/Parameter: tfraction i</p> <p>Unit: Fraction of 365 for Institutions, Fraction of 236 for Schools</p> <p>Description: Fraction of the days in use in year y of the IICS installed</p>

Value(s) of monitored parameter: ER calculation spreadsheet (column T of tab ER calculations /04/). The value of the monitoring parameter is reported in the ER sheet /04/. As verified from the sales agreement /10/ and ER sheet /04/. The number of operational days of an IICS is calculated from the commissioning date (date of use) of the IICS which is the date on which the first IICS is put into use for the first time. For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365.

The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. Simoshi confirms this date is true through an on-site visit. Verification team has verified this process from the on-site interview of PP and the schools officials/kitchen staff.

This monitoring parameter is related to the ex-ante parameter **Bold,p** (given under section B.6.2 of the registered PDD /25/) which is sourced from the Standardized Baseline: ASB0016 'Institutional Cook Stoves in Uganda', Version 01.0 /37/. Under the Standardized Baseline, the baseline annual quantity of the woody biomass per person per year (*Annual quantity of woody biomass that would have been used per person in the school/institution in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices*) has already considered 236 operation days of a year. The same is verified from the 2nd submission of approval history of the Standardized baseline /37/.

Hence for each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 which is accepted to the verification team.

To verify this monitoring parameter, verification team has done the IICS sampling from the distributed IICS under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sample check of the sales agreement (mention the date of use of IICS) /10/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan.

Measuring/reporting frequency: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as verified from the sales agreement /10/ and from sample IICS on-site interview. For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 and hence reported yearly which is in compliance with the monitoring plan /25/. The same is verified from the ER sheet /04/.

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes

Type of monitoring equipment: Not applicable

Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable

Calibration frequency /interval: Not applicable

Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable

Company performing the calibration: Not applicable

Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable

Is (are) calibration(s) valid for the whole reporting period?: Not applicable

If applicable, has the reported data been cross-checked with other available data?: Not Applicable

How were the values in the monitoring report verified?: For each IICS, "tfraction,i" is calculated by the number of days the IICS is in use in the respective year divided by 365 and hence reported yearly which is in compliance with the monitoring plan /25/. The same is verified from the ER sheet /04/.

Verification team has verified the monitoring parameter through sample check of the

	<p>sales agreement (mention the date of use of IICS) /10/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not Applicable</p>
3	<p>Data/Parameter: Date of commissioning of project device i</p> <p>Unit: Date</p> <p>Description: Actual date of commissioning of the project device</p> <p>Value(s) of monitored parameter: ER calculation spreadsheet (column D of tab ER calculations /04/). The value of the monitoring parameter is reported in the ER sheet /04/. As verified from the sales agreement /10/ and ER sheet /04/, The number of operational days of an IICS is calculated from the commissioning date (date of use) of the IICS which is the date on which the IICS is put into use for the first time.</p> <p>The commissioning date is provided by the kitchen staff and the school/institution officials as of when they agree to put the IICS in use. Simoshi confirms this date is true through an on-site visit. Verification team has verified this process from the on-site interview of PP and the schools officials/kitchen staff.</p> <p>To verify this monitoring parameter, verification team has done the IICS sampling from the distributed IICS under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sample check of the sales agreement (mention the date of use of IICS) /10/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan.</p> <p>Measuring/reporting frequency: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as verified from the sales agreement /10/ and from sample IICS on-site interview. This parameter is being monitored & recorded as per the monitoring plan.</p> <p>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes</p> <p>Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable</p> <p>If applicable, has the reported data been cross-checked with other available data?: Not Applicable</p> <p>How were the values in the monitoring report verified?: The commissioning date of the IICS is mentioned in the sales agreement as and when the IICS is distributed as</p>

	<p>verified from the sales agreement /10/ and from sample IICS on-site interview. Verification team has verified the monitoring parameter through sample check of the sales agreement (mention the date of use of IICS) /10/, site visit interview and also from the details given under the ER sheet /04/ and found consistent.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not Applicable</p>
	<p>4</p> <p>Data/Parameter: $N_{y,inst}$</p> <p>Unit: Number of people in the school/institution in year y</p> <p>Description: Number of people in the school/institution that consume food cooked by IICS</p> <p>Value(s) of monitored parameter: 764 (column N row 287, from tab Ny Term Information Update of ER calculation spreadsheet /04/).</p> <p>The form "Term Information Update" is completed for each school/institution three times per year and contains the detailed information of number of people attending, type (day or boarding) and it is signed and officially stamped by the school/institution. The average of the information in the three 'Term Information Update' sheets of the respective year has been taken for the number of people in the school/institution in year y.</p> <p>To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sample check of the Term Information Update /11/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan.</p> <p>Measuring/reporting frequency: This monitoring parameter is measured three times a year by PP through "Term Information Update" /11/. The average of the information in the three 'Term Information Update' sheets of the respective year has been taken for the number of people in the school/institution in year y. The measuring/reporting frequency is as per the monitoring plan /25/.</p> <p>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes</p> <p>Type of monitoring equipment: Not applicable</p> <p>Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable</p> <p>Calibration frequency /interval: Not applicable</p> <p>Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable</p> <p>Company performing the calibration: Not applicable</p> <p>Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable</p> <p>Is (are) calibration(s) valid for the whole reporting period?: Not applicable</p> <p>If applicable, has the reported data been cross-checked with other available data?: Not applicable</p> <p>How were the values in the monitoring report verified?: Verification team has</p>

	<p>verified the monitoring parameter through sample check of the Term Information Update /11/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable</p>
5	<p>Data/Parameter: μ_y</p> <p>Unit: Fraction</p> <p>Description: Adjustment to account for any continued use of pre-project devices during the year y</p> <p>Value(s) of monitored parameter: 1, column O of tab ER calculations /04/. The value of the monitoring parameter is reported in the ER sheet /04/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year.</p> <p>Simoshi collects information in the form "Kitchen Information Update" /12/ from each school/institution on a quarterly basis to ensure that no traditional stoves are seen in use. Throughout the monitoring period, no pre-project devices were found in use in any of the participating school/institution's kitchens.</p> <p>To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sample check of the Kitchen Information Update /12/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan.</p> <p>Measuring/reporting frequency: This monitoring parameter is measured quarterly by PP through "Kitchen Information Update" /12/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year. The measuring/reporting frequency is as per the monitoring plan /25/.</p> <p>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes</p> <p>Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable</p> <p>If applicable, has the reported data been cross-checked with other available data?: Not applicable</p>

	<p>How were the values in the monitoring report verified?: Verification team has verified the monitoring parameter through sample check of the Kitchen Information Update /12/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable</p>
<p>6</p>	<p>Data/Parameter: $U_{y,inst}$</p> <p>Unit: Fraction</p> <p>Description: Usage rate of stoves in institution in year y</p> <p>Value(s) of monitored parameter: 1, column P of tab ER calculations /04/. The value of the monitoring parameter is reported in the ER sheet /04/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year.</p> <p>Simoshi collects information in the form "Kitchen Information Update" /12/ from each school/institution on a quarterly basis to ensure that all IICS are in use, the condition of the IICS and whether they need maintenance/repair. If a school/institution does not use all of its IICS, Simoshi has asked for the reasons and take immediate corrective actions (if needed) to repair or replace those IICS not in use. Throughout the monitoring period, the project devices have always been found in use in all of the quarterly 'Kitchen Information Updates'.</p> <p>To verify this monitoring parameter, verification team has done the schools sampling from the total number of schools under the project activity (till the end of this monitoring period) as discussed under section D.4 of this report. Verification team has verified the monitoring parameter through sample check of the Kitchen Information Update /12/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report. Hence the verification team was able to conclude that this parameter is being monitored & recorded as per the monitoring plan.</p> <p>Measuring/reporting frequency: This monitoring parameter is measured quarterly by PP through "Kitchen Information Update" /12/. The average of the information in the quarterly 'Kitchen Information Update' sheets of the respective year has been taken for ER calculation for that year. The measuring/reporting frequency is as per the monitoring plan /25/.</p> <p>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No): Yes</p> <p>Type of monitoring equipment: Not applicable Is accuracy of the monitoring equipment as stated in the PDD?: Not applicable Calibration frequency /interval: Not applicable Is the calibration interval in line with the monitoring plan of the PDD?: Not applicable Company performing the calibration: Not applicable Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Not applicable Is (are) calibration(s) valid for the whole reporting period?: Not applicable</p>

	<p>If applicable, has the reported data been cross-checked with other available data?: Not applicable</p> <p>How were the values in the monitoring report verified?: Verification team has verified the monitoring parameter through sample check of the Kitchen Information Update /12/, site visit interview and also from the details given under the ER sheet /04/ and found consistent. The sampling approach and the results of the sampling by DOE are explained in the section D.4 of this report.</p> <p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?: Yes</p> <p>In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?: Not applicable</p>
Findings	CL-04, CL-05, CAR-04 and CAR-05 have been raised in this regard and successfully closed. Refer Appendix 4 of this report for more details.
Conclusion	As per para 360 to 361 of CDM VVS for project activities version 02.0 /27/, the assessment team concludes that the monitoring of the project activity is being carried out in accordance with the registered PDD monitoring plan /25/ and meets the requirements of the applied monitoring methodology /23/. The adequacy and compliance of the registered monitoring plan /25/ in the MR can be concluded to be conforming. The flow of the information from the point of generation up to reporting has been reviewed and found to be correct and appropriate meeting the requirements of the applied methodology.

E.6.3. Implementation of sampling plan

Means of verification	There is no sampling plan applied for this project activity as verified from the registered PDD /25/.
Findings	No CAR/CL raised.
Conclusion	There is no sampling plan applied for this project activity which is in compliance with the registered PDD /25/.

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	<p>Verification team has checked whether the calibration of the measuring equipment that has an impact on the claimed GHG emission reductions is conducted by the PP at a frequency specified in the monitoring plan /25/.</p> <p>For the monitoring parameter $\eta_{new,i,j}$ the monitoring equipments (Weighing scale, Digital thermometer and Moisture meter) were used during the WBT test. Verification team has checked the monitoring equipments during the on-site visit.</p> <table border="1"> <thead> <tr> <th colspan="2">Weighing scale</th></tr> </thead> <tbody> <tr> <td>Type</td><td>TCS</td></tr> <tr> <td>Accuracy class</td><td>150 kg capacity by 0.01 kg</td></tr> <tr> <td>Calibration date</td><td>07/05/2019</td></tr> <tr> <td>Calibration entity</td><td>UNBS</td></tr> <tr> <td>Certificate number</td><td>01190664</td></tr> <tr> <td>Serial number</td><td>66286</td></tr> <tr> <td>Calibration frequency</td><td>Before annual monitoring</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">Digital thermometer</th></tr> </thead> <tbody> <tr> <td>Type</td><td>SL-DTH01 Model 2000</td></tr> <tr> <td>Accuracy class</td><td>-200° C to 1372° C by 0.1° C</td></tr> <tr> <td>Calibration date</td><td>06/05/2019</td></tr> <tr> <td>Calibration entity</td><td>UNBS</td></tr> <tr> <td>Certificate number</td><td>0219410</td></tr> <tr> <td>Serial number</td><td>SL-DTH01</td></tr> <tr> <td>Calibration frequency</td><td>Before annual monitoring</td></tr> </tbody> </table>	Weighing scale		Type	TCS	Accuracy class	150 kg capacity by 0.01 kg	Calibration date	07/05/2019	Calibration entity	UNBS	Certificate number	01190664	Serial number	66286	Calibration frequency	Before annual monitoring	Digital thermometer		Type	SL-DTH01 Model 2000	Accuracy class	-200° C to 1372° C by 0.1° C	Calibration date	06/05/2019	Calibration entity	UNBS	Certificate number	0219410	Serial number	SL-DTH01	Calibration frequency	Before annual monitoring
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Certificate number	0219410																																
Serial number	SL-DTH01																																
Calibration frequency	Before annual monitoring																																

		Moisture meter
	Type	Extech M050 SL-MM1
	Accuracy class	5 – 50%
	Calibration date	07/05/2019
	Calibration entity	UNBS
	Certificate number	0619298
	Serial number	SL-MM1
	Calibration frequency	Before annual monitoring
<p>Calibration frequency /interval: WBT test for IICS efficiency was done from 09/05/2019 to 27/05/2019 as checked from the WBT test records /09/. As verified from the calibration records /06/, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test which is accepted to the verification team.</p> <p>Is the calibration interval in line with the monitoring plan of the PDD?: Calibration frequency of the monitoring instruments has not been defined in the monitoring plan /25/. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test (from 09/05/2019 to 27/05/2019) which is accepted to the verification team</p> <p>Company performing the calibration: As verified from calibration reports /06/, The Calibration of all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) was done by Uganda National Bureau of Standards which is a government agency and hence accepted to the verification team.</p> <p>Did calibration confirm proper functioning of monitoring equipment? (Yes / No): Verification team has checked the calibration records /06/ for all the three monitoring instruments (Weighing scale, Digital thermometer and Moisture meter) and found the instruments functioning properly.</p> <p>Is (are) calibration(s) valid for the whole reporting period?: Not applicable as the monitoring instruments are only used during the WBT test which was done from 09/05/2019 to 27/05/2019. During this monitoring period, the calibration of the monitoring equipments (Weighing scale calibrated on 07/05/2019, Digital thermometer calibrated on 06/05/2019 and Moisture meter calibrated on 07/05/2019) was done before the WBT test (from 09/05/2019 to 27/05/2019) which is accepted to the verification team</p>		
Findings	No finding has been raised.	
Conclusion	As per para 365 to 370 of CDM VVS for project activity version 02.0 /27/, the Verification team confirms that the calibration frequency is in line with the monitoring plan mentioned in the registered PDD /25/.	

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	<p>Verification team confirm that the calculation, applied formulae and the method for calculation of baseline emissions are in accordance with the registered PDD /25/ and are in line with the requirements of the applied methodology (AMS-II.G. ver. 8 /23/). The formulae and the methods referred in the MR /02/ and the emission reduction calculation spread sheet /04/ for estimation of emission reduction complies with the corresponding formulae and methods in the registered PDD /25/.</p> <p>As per the registered PDD /25/, The calculation of emission reductions is based on the number of individuals served instead of number of project devices.</p>
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As per the registered PDD /25/, the emission reduction is calculated using the formula:

$$ER_{y,i} = B_{y,savings,i} \times N_{y,i} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} \times t_{fraction,i} - LE_y$$

Where:

$B_{y,savings,i}$ = Quantity of woody biomass that is saved in tonnes per person in year y

$N_{y,i}$ = Number of individuals served in year y

μ_y = Adjustment to account for any continued use of pre-project device during the year y when applying equations 6 and 8 of the methodology (fraction). Use 1.0 in other cases

$f_{NRB,y}$ = Fraction of woody biomass saved by the project activity in year y.

$NCV_{biomass}$ = Net calorific value of the non-renewable woody biomass that is substituted.

$EF_{projected_fossilfuel}$ = Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers.

$t_{fraction,i}$ = Fraction of the days in use in year y of the IICS installed

LE_y = Leakage emissions in the year y

For $B_{y,savings,i}$, PP has used equation 6 of option 3 of the applied methodology AMS-II.G. Version 8 /23/ which is in compliance with the registered PDD /25/.

$$B_{y,savings,i,j} = B_{old,i,j} \times \left(1 - \frac{\eta_{old,i,j}}{\eta_{new,i,j}}\right)$$

Where:

$B_{old,i,j}$ = Annual quantity of woody biomass that would have been used per person in the school/institution in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices

$\eta_{old,i,j}$ = Efficiency of the baseline system/s being replaced by project devices of type i.

$\eta_{new,i,j}$ = Efficiency of the system being deployed as part do the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol.

All the ex-ante parameters (1. $B_{old,i,j}$, 2. $\eta_{old,i,j}$, 3. $f_{NRB,y}$, 4. $NCV_{biomass}$, 5. $EF_{projected_fossilfuel}$, 6. LE_y) have been justified in the section E.6.1 of this report. Verification team confirms that all the ex-ante parameters used in the ER sheet /04/ are in accordance with the registered PDD /25/ and also the applied methodology /23/.

Also the ex-post parameters (1. $\eta_{new,i,j}$, 2. $t_{fraction,i}$, 3. $N_{y,i}$, 4. μ_y) have been justified in the section E.6.2 of this report. Verification team confirms that all ex-post parameters have been monitored in accordance with the registered PDD /25/ and also the applied methodology /23/.

The calculation of the emission reductions /04/ is based on an individual institution based on the number of individuals served which is in compliance with the registered PDD /25/.

In the case of schools, Emission reduction is based on the average number of children attending on a day and boarding basis, and including the number of staff also working in the school. Till the end of this monitoring period, total 49 schools were enrolled in the project and the calculation of the actual number of pupils enrolled and staff (teachers and non-teachers) in the school is based on the actual data of these 49 Schools as recorded in the document Term Information Update /11/.

The steps taken and the equations and parameters applied in the ER sheet /04/ to calculate emission reductions comply with the requirements of the registered PDD /25/ and the selected methodology /23/. The emission reduction calculation is completely traceable and verified by reviewing the ER spread sheet /04/ submitted

	<p>by the PP.</p> <p>Hence baseline emission for this monitoring period is 8,457 tCO_{2e} (Rounded down).</p> <p>PP has submitted the calculation in the excel sheet /04/. The baseline calculation in the excel sheet is checked whether the calculation is in accordance with the formula given in the registered PDD /25/ and the selected methodology /23/ and found OK.</p>
Findings	No CAR/CL raised.
Conclusion	<p>As per para 372 and 373 of CDM VVS for project activity version 02.0 /27/, Verification team concludes that the calculation provided in the monitoring report /02/ and emission reduction spread sheet /04/ are complete and reflect all the requirements of the registered monitoring plan /25/ and:</p> <p>a) All the monitored data pertaining to baseline calculation as required by the registered monitoring plan was available to PP, the same has been verified by the verification team.</p> <p>b) The calculations of GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan /25/ and applied methodology /23/.</p> <p>c) The ex-ante emission factors correctly sourced from the registered PDD /25/ and was found to be appropriate and justified.</p> <p>d) The ER calculation sheet /04/ provided is clear, transparent and the calculations provided in the sheet are reproducible.</p>

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	Document Review and on site visit.
Findings	No CAR/CL raised.
Conclusion	There is no project emissions and hence not applicable.

E.8.3. Calculation of leakage GHG emissions

Means of verification	Document Review and on site visit.
Findings	No CAR/CL raised.
Conclusion	Potential leakage is accounted for by multiplying with net gross adjustment factor which is in compliance with the registered PDD /25/ and hence accepted to the Verification team.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	<p>The verification team has checked whether calculations of GHG emission reduction have been carried out in accordance with the formulae and methods described in the registered monitoring plan /25/.</p> <p>Section E.4 of MR demonstrate the summary of GHG emission reductions for the monitoring period and calculated according to the applied methodology as follows: $ER_y = BE_y - L_y$ The ER calculation sheet and monitoring report is verified to check the calculation.</p>
Findings	No CAR/CL raised.
Conclusion	<p>As per para 372 and 373 of CDM VVS for project activity version 02.0 /27/, Verification team concludes that the calculation provided in the monitoring report /02/, and emission reduction spread sheet /04/ are complete and reflect all the requirements of the monitoring plan /25/ and:</p> <p>a) The emission reduction value reported (i.e. 8,457 tCO_{2e}) is verified to be correct.</p> <p>b) The summary table in the MR has been filled correctly and the values are in line with the related emissions reduction spreadsheet.</p> <p>c) All the monitored data as required by the registered monitoring plan /25/ was available to PP, the same has been verified by the verification team.</p> <p>d) Formula used for the baseline was in line to the registered monitored plan /25/.</p> <p>e) The ex-ante emission factors correctly sourced from the registered PDD /25/ and was found to be appropriate and justified.</p>

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	Section E.5 of the MR includes a comparison of the calculated actual emission reductions with the ex-ante calculated values in the registered PDD /25/.	
	Emission reduction estimated as per the registered PDD /25/	Actual emission reduction achieved as per Monitoring report /02/ for the monitoring period
	55,997 t CO ₂ e	8,457 t CO ₂ e
	In summary, verification team confirms that the actual emission reduction is lower than the estimate of the registered PDD /25/ for the current monitoring period.	
Findings	No CAR/CL is raised.	
Conclusion	In summary, verification team confirms that the actual emission reduction is lower than the estimate of the registered PDD /25/ for the current monitoring period. Verification team confirms that the comparison for the estimated and actual emission reduction for this monitoring period is correctly calculated and reported.	

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The actual emission reductions are lower than the estimated emission reductions based on the registered PDD /25/.
Findings	No CAR/CL is raised.
Conclusion	The actual emission reductions are lower compared to the ex-ante calculations because the number of schools/institutions included under the Project Activity is lower than anticipated in the registered PDD /25/.

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	The complete monitoring period falls after 01 January 2013 and therefore the total ERs during the monitoring period i.e. 01/03/2017 to 31/05/2019 pertains to the 2 nd commitment period. Total 8,457 tCO ₂ e CERs verified during this monitoring period i.e. 01/03/2017 to 31/05/2019 (including both the days).
Findings	No CAR/CL raised.
Conclusion	Total 8,457 tCO ₂ e CERs verified pertains to the period from 1 January 2013 onwards.

E.9. Assessment of reported sustainable development co-benefits

Means of verification	Not applicable for the project activity
Findings	Not applicable for the project activity
Conclusion	Not applicable for the project activity

E.10. Global stakeholder consultation

Means of verification	The Monitoring report for this monitoring period was made available on (https://cdm.unfccc.int/Projects/DB/CarbonCheck_Cert1486462226.32/view) for comments in accordance with the CDM PCP for project activities, version 02.
Findings	Nil
Conclusion	No comments received.

SECTION F. Internal quality control

>> The draft verification report prepared by team leader is reviewed by an independent technical reviewer (having competence of relevant technical area himself/herself or through an independent technical area expert) to confirm the internal procedures established by KBS are duly followed and the verification report/opinion is reached in an objective manner and complies with the applicable CDM requirements.

The independent technical reviewer may approve or reject the draft verification report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before the request for issuance is submitted to UNFCCC. The final decision is taken by the Manager Technical and Certification. The technical reviewer and Manager (Technical & Certification) can be same person.

The final decision is authorized by Managing Director, KBS once the report is approved by the Manager (Technical & Certification).

SECTION G. Verification opinion

>> The verification team confirms that the evidence is of sufficient quantity, appropriate quality and reliable. The reported values, notation, units and sources in the monitoring report for all the monitoring parameters have been cross checked with the emission reduction sheet and monitoring report. During the course of verification and on site visit, the data submitted by PP was cross verified with the values mentioned in the emission reduction sheet /04/ and monitoring report /02/. The procedure for data monitoring, recording, transfer and compilation was also verified and found in compliance with the monitoring plan as mentioned in the registered PDD/25/.

Evidences (Documents/interview/site visit) referred for verification of individual monitoring parameter and fixed parameters are defined in section E.6 above. It is confirmed by the assessment team that the reported emission reductions have been conservatively calculated. A list of referred documents for verification is also included in Appendix 3 of this report.

Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 8,457 tCO₂e emission reductions during period 01/03/2017 to 31/05/2019 (Including both the days).

SECTION H. Certification statement

>>KBS Certification Services Pvt. Ltd. has been contracted by 'Simoshi Limited' to undertake independent verification and certification for the greenhouse gas (GHG) emission reductions reported from the CDM Project activity "Institutional Improved Cook Stoves for Schools and Institutions in Uganda" (UNFCCC Ref. No. 10345) for the monitoring period 01/03/2017 to 31/05/2019 (including both dates) in the Monitoring Report Version 01 (first version) dated 29/06/2019 /01/.

The verification is based on the registered PDD /25/ and the monitoring report for this project. Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakech accord, as well as those defined by the CDM Executive Board.

The management of the 'Simoshi Limited' is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project Final Monitoring Report Version 03 dated 13/09/2019/02/. The calculation and determination of GHG emission reductions from the project is the responsibility of the management of the 'Simoshi Limited'. The development and maintenance of records and reporting procedures are in accordance with the Monitoring Report Version 03 dated 13/09/2019/02/.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the monitoring period 01/03/2017 to 31/05/2019 (including both dates) based on the reported emission reductions in the Final Monitoring Report Version 03 dated 13/09/2019 /02/ for the same period.

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these, KBS planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that this reported amount of GHG emission reductions for the period is fairly stated.

KBS confirms the following;

Reporting period: 01/03/2017 to 31/05/2019 (including both dates)

Verified and certified emission in the above reporting period:

	Amount	Unit
GHG Emission Reductions (ER)	8,457	tCO ₂ e
Project emissions (PE)	0	tCO ₂ e
Leakage emissions (LE)	0	tCO ₂ e
Certified emission reductions (CERs)	8,457	tCO₂e

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CDM PCP	Clean Development Mechanism Project Cycle Procedure for Project Activities
CDM PS	Clean Development Mechanism Project Standard for Project Activities
CDM VVS	CDM Validation and Verification Standard for Project Activities
CER	Certified Emission Reduction(s)
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CP	Commitment Period
DOE	Designated Operational Entity
EB	Executive Board
EF	Emission factor
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
MP	Monitoring Plan
MR	Monitoring Report
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention on Climate Change

Appendix 2. Competence of team members and technical reviewers

Personnel Name:		Chetan Swaroop Sharma	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
	TA 1.2: Energy generation from renewable energy sources		
Energy Demand	TA 3.1. Energy demand		
Waste handling and disposal	TA 13.1. Solid waste and wastewater TA 13.2. Manure		
Approved by (Manager C & T)	Sanjay Kandari		
Approval date:	01/05/2017		

Personnel Name:		Ms. Namazzi Gloria Veronica	
Qualified to work as:			
Team Leader	<input type="checkbox"/>	Technical Expert	<input type="checkbox"/>
Validator/Verifier	<input type="checkbox"/>	Financial Expert	<input type="checkbox"/>
Technical Reviewer	<input type="checkbox"/>	Local Expert (Uganda)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Not applicable		Not applicable	
Approved by (Manager C & T)		Sanjay Kandari	
Approval date:		20/06/2019	

Personnel Name:		Rohit Badaya	
Qualified to work as:			
Team Leader	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>
Validator/Verifier	<input checked="" type="checkbox"/>	Financial Expert	<input checked="" type="checkbox"/>
Technical Reviewer	<input checked="" type="checkbox"/>	Local Expert (India)	<input checked="" type="checkbox"/>
Area(s) of Technical Expertise			
Sectoral Scope		Technical Area	
Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
	TA 1.2: Energy generation from renewable energy sources		
Energy demand	TA 3.1. Energy Demand		
Waste Handling and Disposal	TA 13.1 Solid waste and wastewater TA 13.2 Manure		
Approved By	Manager Competency & Training		
Approval date:	16/10/2017		

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Simoshi Limited	Webhosted monitoring report	Version 1.0, dated 29/06/2019 (published)	Simoshi Limited
2.	Simoshi Limited	Final Monitoring report	Version 3.0, dated 13/09/2019 (final)	Simoshi Limited
3.	Simoshi Limited	Draft ER calculation sheet	Corresponding to hosted MR version 1.0	Simoshi Limited
4.	Simoshi Limited	Final ER calculation sheet	Corresponding to final MR version 3.0	Simoshi Limited
5.	Simoshi Limited and Uga stove	Commercial agreement between Simoshi Limited and Uga stove	01/02/2017	Simoshi Limited

6.	Uganda National Bureau of Standards	Calibrations certificates for the monitoring equipment's: 1. Balance 2. Thermometer 3. Moisture meter	-	Simoshi Limited
7.	Simoshi Limited and Uga stove	Technical specification of the IICS distributed (Manual)	-	Simoshi Limited
8.	Uganda Stove Manufacturers Ltd. (UGASTOVE)	Technical document for the lifetime of the IICS distributed	16/11/2016	Simoshi Limited
9.	Simoshi Limited	Records for the monitoring parameter $\eta_{new,i,j}$: Testing results for IICS Ugastove model of 30 litres capacity – WBT for efficiency, efficiency calculation sheet and photos corresponding to this monitoring period	WBT started on 09/05/2019	Simoshi Limited
10.	Simoshi Limited	Records for the monitoring parameter “tfraction i” and “Date of commissioning of project device i” i.e. Sales agreement of the IICS distributed under the project activity for this monitoring period	-	Simoshi Limited
11.	Simoshi Limited	Records for the monitoring parameter $N_{y,inst}$: School Term update sheet for this monitoring period	School Term update sheet	Simoshi Limited
12.	Simoshi Limited	Records for the monitoring parameters μ_y and $U_{y,inst}$: Usage survey results (Kitchen information update) for this monitoring period	Kitchen information update	Simoshi Limited
13.	Simoshi Limited	1. Training records for kitchen/monitoring team etc. 2. School kitchen training assessment	-	Simoshi Limited
14.	KBS Certification Services Pvt. Ltd.	Photographic evidence taken during site visit	-	KBS Certification Services Pvt. Ltd.
15.	Simoshi Limited	IICS installation log sheets for the IICS distributed during the monitoring period	-	Simoshi Limited
16.	Simoshi Limited and Uga stove	IICS Quality Assurance - Control Manual v03	-	Simoshi Limited
17.	Simoshi Limited	IICS Quality Assurance and quality control assessment	-	Simoshi Limited
18.	Simoshi Limited	IICS maintenance sheets corresponding to the monitoring period	-	Simoshi Limited
19.	Uganda Industrial research institute	IICS material testing results by Uganda Industrial research institute	Dated 09/12/2016, 05/02/2018, 01/04/2019	Simoshi Limited
20.	Simoshi Limited	Simoshi QA/QC Manual and maintenance manual (IICS Maintenance Manual v03)	-	Simoshi Limited
21.	Simoshi Limited	Simoshi Monitoring Manual v02	-	Simoshi Limited
22.	Clean Cooking Alliance	The Water Boiling Test, Version 4.2.3	Released on 19/03/2014	Simoshi Limited
23.	UNFCCC	Approved monitoring methodology: AMS-II.G. ver. 8 - Energy efficiency measures in thermal applications of non-renewable biomass	-	Publicly Available

24.	UNFCCC	Guidelines for Application of materiality in verifications version 2.0	-	Publicly Available
25.	Simoshi Limited	Registered PDD	Version 03, dated 02/02/2017	Publicly Available
26.	Carbon Check India Pvt. Ltd.	CDM Validation Report	Version 03, dated 03/02/2017	Publicly Available
27.	UNFCCC	CDM Validation and Verification Standard for project activities	Version 02.0	Publicly available
28.	UNFCCC	CDM Project Standard for project activities	Version 02.0	Publicly available
29.	UNFCCC	CDM project cycle procedure for project activities	Version 02.0	Publicly available
30.	UNFCCC	Standard: Sampling and surveys for CDM project activities and programme of activities	Version 7.0	Publicly available
31.	UNFCCC	Guidelines for sampling and surveys for CDM project activities and programme of activities	Version 4.0	Publicly available
32.	UNFCCC	CDM-MR-FORM - Monitoring report form for CDM project activity, Version 07.0: https://cdm.unfccc.int/Reference/PDDs_Forms/index.html	-	Publicly available
33.	UNFCCC	Glossary "CDM terms"	Version 09.1	Publicly available
34.	UNFCCC	SSG WG to Request for Clarification SSC_725 : Clarification on efficiency testing for institutional improved cookstoves of different sauce pan capacities under AMS-II.G	-	Publicly available
35.	UNFCCC	SSG WG to Request for Clarification SSC_726 : Clarification on the requirements to use simplified approach to test stove efficiency under AMS-II.G	-	Publicly available
36.	UNFCCC	SSG WG to Request for Clarification SSC_727 : Clarification on the test method to demonstrate above 20% stove efficiency under AMS-II.G	-	Publicly available
37.	UNFCCC	Standardized Baseline: ASB0016 'Institutional Cook Stoves in Uganda', Version 01.0 And approval history of the Standardized baseline: https://cdm.unfccc.int/methodologies/standard_base/2015/sb63.html https://cdm.unfccc.int/methodologies/standard_base/2015/sb28.html	-	Publicly available
38.	UNFCCC	Sample size calculator	-	Publicly available

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

No FAR raise during validation

FAR ID	xx	Section no.	Date: DD/MM/YYYY
Description of FAR			

Project participant response	Date: DD/MM/YYYY
Documentation provided by project participant	
DOE assessment	Date: DD/MM/YYYY

Table 2. CL from this verification

CL ID	01	Section no.	E.1	Date: 09/08/2019
Description of CL				
Under section E.5 of the hosted MR /01/, the estimate emission reduction have been calculated for the period 01/03/2017 to 28/02/2019 however the selected monitoring period as per page 1 of the MR /01/ is 01/03/2017 to 31/05/2019.				
Project participant response				Date: 27/08/2019
Page 1 of the Monitoring Report has been now adjusted to show ER ex-ante calculations from the period 01/03/2017 to 31/05/2019.				
Documentation provided by project participant				
Monitoring Report				
DOE assessment				Date: 29/08/2019
Correction has been done in the revised MR /02/ and found OK. Now the Estimated ex-ante emission reductions are calculated for the selected monitoring period i.e. 01/03/2017 to 31/05/2019 (Including both the days). Hence this CL is closed.				

CL ID	02	Section no.	E.3	Date: 09/08/2019
Description of CL				
Under the section B.1 of the hosted MR /01/, PP need to provide the summary of the technologies (e.g. sauce pan capacity, model, potable/fixed built-in type, single pot/multiple pot) distributed under the project activity during this monitoring period.				
Project participant response				Date: 12/08/2019
PP has adjusted the Ugastove's IICS specifications as requested under section B.1				
Documentation provided by project participant				
Monitoring Report				
DOE assessment				Date: 29/08/2019
Correction has been done in the revised MR /02/ and found OK. Verification team has further checked the tab "IICS serial numbers" of ER calculation sheet /04/ which describe STOVE SERIAL NUMBER, SALES DATE, PUT IN USE DATE, stove capacity, Stove Mobility, Stove Model, Fuel Type. Verification team has checked the IICS distributed under the project activity through on-site sampling and found consistent with the Monitoring report /02/, ER sheet /04/, registered PDD /25/ and other technical documents /07/. Hence this CL is closed.				

CL ID	03	Section no.	E.3	Date: 09/08/2019
Description of CL				
1. PP need to justify that project activity fall within the small-scale threshold i.e. aggregated thermal energy savings for this monitoring period has not exceeded 180 GWh _{th} /year as the same could not be verified from the submitted ER sheet /03/.				
2. PP needs to justify that the size of each unit is within 5% of the small-scale threshold which is a requirement as per section "B.5 Demonstration of additionality" of registered PDD /25/.				
Project participant response				Date: 27/08/2019
1. PP has included a spreadsheet labelled "SSC threshold" in the Simoshi ER calculation spreadsheet that justifies the aggregated energy savings from this monitoring period has not exceeded 180 GWh _{th} /year.				
2. PP has adjusted the ER spreadsheet accordingly, and also used the average of the highest population of both day and boarding schools for the calculation on the justification.				
Documentation provided by project participant				
Monitoring Report				
Simoshi CER calculation				

DOE assessment	Date: 29/08/2019
<p>1. Correction has been done in the revised ER sheet /04/ and found OK. According to the tab "SSC threshold" of the revised ER sheet /04/, the actual number of school added under the project activity are lower than the allowed maximum no of schools (Calculated as per small-scale threshold 180 GWh_{th}/year). Hence the project activity is within the small-scale threshold i.e. aggregated thermal energy savings has not exceeded 180 GWh_{th}/year during this monitoring period. Hence this part of CL is closed.</p> <p>2. A tab "Debundling and Additionality" has been added under the revised ER sheet /04/ and it is clear that size of each unit (IICS) is within 5% of the small-scale threshold i.e. 9 GWh_{th}/year. Hence this part of CL is closed.</p>	

CL ID	04	Section no.	E.6.2	Date: 09/08/2019
Description of CL				

Under the monitoring parameter " $\eta_{new,i,j}$ " in the section D.2 of the hosted MR /01/:

1. Under the heading "Measured/calculated/default", it is not specified whether the monitoring is measured, calculated or default which is required as per MR filling template /32/.
2. Under the heading "Measurement methods and procedures" of registered PDD /25/, two methods for the efficiency measurement have been provided. It is not clear which option has been opted by PP for the efficiency measurement.
3. Under the heading "Monitoring equipment": The type, accuracy class, serial number, calibration frequency, date of last calibration and validity are not specified which is required as per MR filling template /32/.
4. The monitoring frequency is mentioned as annually. The selected monitoring period is from 01/03/2017 - 31/05/2019 however the WBT test has been done in 2019 only (during this monitoring period). PP need to clarify how the requirement "Annual monitoring" has been fulfilled.

Project participant response	Date: 27/08/2019
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1. PP has adjusted the MR accordingly and specified the monitoring is measured.
2. PP has adjusted the MR accordingly and provided one method used.
3. PP has adjusted the MR accordingly and date of calibration and validity have now been included. PP has now included the equipment serial/identification number and the calibration frequency.
4. PP has extended its first monitoring period to 27 months as a result of fewer IICS disseminated than expected. Although the WBT was performed in May 2019, it is a conservative approach because the WBT thermal efficiency obtained is the most recent value and applied across all the IICS population. PP has mentioned the temporary deviation on section B.2.1 of the Monitoring Report and on the monitored parameter Nnew.

Documentation provided by project participant

Monitoring Report
UNBS testing certificates.

DOE assessment	Date: 29/08/2019
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1. Correction has been done in the revised monitoring report /02/ and found OK. The monitoring parameter " $\eta_{new,i,j}$ " is a measure parameter using the WBT on the first batch of 30 litres capacity IICS. Hence this part of CL is closed.
2. Correction has been done in the revised MR /02/ and found OK. PP has taken the census approach and all 12 disseminated IICS of 30 litres capacity from the first batch were tested following the WBT version 4.2.3, with three tests conducted on every IICS which is in compliance with the SSC_725 clarification /34/ and sentence "*PP will carry out WBTs on 30 litres IICS capacity and apply conservatively the resulted thermal efficiency across all IICS sizes. The SSC WG considered that applying the lowest efficiency found in IICS with saucepan capacities of 30 litres for IICS with saucepan capacities larger than 30 litres would be a conservative approach when the IICS designs and maintenance practices are comparable. The thermal efficiency of IICS with 30 litres saucepan capacity in the first batch would be used for annual efficiency monitoring as specified in option (c) of paragraph 25 and the result would be applied across all IICS sizes.*" under section B.7 of the registered PDD /25/. PP has taken all 12 disseminated IICS of 30 litres capacity from the first batch with three tests conducted on every IICS and applied the lowest efficiency found in WBT test conservatively to all the stoves which is accepted to the verification team. Hence this part of CL is closed.
3. Correction has been done in the revised MR /02/ and found OK. Verification team has checked the mentioned calibration details from the calibration reports /06/ and found consistent. Hence this part of CL is closed.
4. Justification provided by PP seems acceptable. PP has done WBT for the efficiency in May 2019 which is the most recent value for the selected monitoring period 01/03/2017 - 31/05/2019 and applied across all the IICS population. Since there is efficiency loss with time, measuring the efficiency in May 2019 will be lowest for the selected monitoring period 01/03/2017 - 31/05/2019 and conservative. Temporary

deviation has been applied for the same by the PP and section B.2.1 of the Monitoring Report /02/ has been filled accordingly. The annual monitoring for the monitoring parameter " $\eta_{new,i,j}$ " was not done during this monitoring period, hence as an alternative approach latest efficiency measurement results (May 2019) results has been applied for the ER calculation which is conservative and hence accepted to the verification team. Hence this part of CL is closed.

CL ID	05	Section no.	E.6.2	Date: 09/08/2019
Description of CL				
For the monitoring parameter " $t_{fraction\ i}$ " in the section D.2 of the hosted MR /01/:				
<ol style="list-style-type: none"> Under the heading "Unit", PP has mentioned Days however this is a fraction and does not has a Unit. Under the heading "Measured/calculated/default", it is not specified whether the monitoring is measured, calculated or default which is required as per MR filling template /32/. Under the heading "Values(s) of monitored parameter", the monitored value corresponding to the monitoring parameter need to be mentioned however the value used for Ex-ante ER calculation i.e. 1 has been mentioned. Under the heading "Monitoring equipment", the description mentioned is not as per the requirement of MR filling template /32/. Also from the review of the submitted ER sheet /03/, Verification team could not verify the calculation of the monitoring parameter and its application in the ER calculation. 				
Project participant response				Date: 27/08/2019
<ol style="list-style-type: none"> PP has amended the MR accordingly to show the correct information. PP has amended the MR accordingly and it is now specified how the monitoring is calculated. PP has amended the MR accordingly and the value is now displayed correctly. PP has adjusted accordingly. PP has amended the MR accordingly as no equipment is used to calculate the value. PP has included a spreadsheet labelled "ER calculations" in the Excel Simoshi ER calculation spreadsheet that provides the formulae and values used for the ER calculations. 				
Documentation provided by project participant				
Monitoring Report				
Simoshi CER calculation				
DOE assessment				Date: 29/08/2019
<ol style="list-style-type: none"> Correction has been done in the revised MR /02/ and found OK. Hence this part of CL is closed. Correction has been done in the revised MR /02/ and found OK. Hence this part of CL is closed. Correction has been done in the revised MR /02/ and found OK. Hence this part of CL is closed. Correction has been done in the revised MR /02/ and found OK. Hence this part of CL is closed. Correction has been done in the revised ER sheet /04/ and found OK. Verification team has checked the tab "ER Calculations" of ER calculation sheet /04/ and found the monitoring parameter calculation in compliance with the registered PDD /25/. Hence this part of CL is closed. 				

Table 3. CAR from this verification

CAR ID	01	Section no.	E.1	Date: 09/08/2019
Description of CAR				
Under the monitoring parameter "Date of commissioning of project device i" in the section D.2 of the hosted MR /01/:				
<ol style="list-style-type: none"> Under the heading "Monitoring equipment", the description mentioned is not as per the requirement of MR filling template /32/. 				
Project participant response				Date: 27/08/2019
PP has amended the MR accordingly. PP has adjusted as "not applicable" on MR.				
Documentation provided by project participant				
Monitoring Report				
DOE assessment				Date: 29/08/2019
Correction has been done in the revised MR /02/ and found OK as no monitoring equipment is used for the measurement of the monitoring parameter. Hence this CAR is closed.				

CAR ID	02	Section no.	E.1	Date: 09/08/2019
Description of CAR				

For the monitoring parameter " μ_y and $U_{y,inst}$ " in the section D.2 of the hosted MR /01/:	
<ol style="list-style-type: none"> Under the heading "Measured/calculated/default" it is not specified whether the monitoring is measured, calculated or default which is required as per MR filling template /32/. Under heading "Values(s) of monitored parameter", the description mentioned is not as per the requirement of MR filling template /32/. Also from the review of the submitted ER sheet /03/, Verification team could not verify the calculation of the monitoring parameter and its application in the ER calculation. 	
Project participant response	Date: 12/08/2019
<ol style="list-style-type: none"> PP has amended the MR accordingly to show the calculated value of the monitored parameter. PP has amended the MR accordingly both "μ_y and $U_{y,inst}$" parameters. PP has included a spreadsheet labelled "ER Calculations" in the Excel Simoshi ER calculation spreadsheet that provides the monitored values used for the ER calculations. 	
Documentation provided by project participant	
Monitoring Report Simoshi CER calculation	
DOE assessment	Date: 29/08/2019
<ol style="list-style-type: none"> Corrections have been done in the revised MR /02/ and found OK. Hence this part of CAR is closed. Corrections have been done in the revised MR /02/ and found OK. Verification team has checked the column "O" and "P" of tab "ER Calculations" of the ER calculation sheet /04/ and found the monitoring parameters reported value (under MR /02/) correct. Hence this part of CAR is closed. Corrections have been done in the revised ER sheet /04/ and found OK. Verification team has checked the column "O" and "P" of tab "ER Calculations" of the ER calculation sheet /04/ to check the monitoring parameters calculation and found OK. Hence this part of CAR is closed. 	

CAR ID	03	Section no.	E.1	Date: 09/08/2019
Description of CAR				
As per the MR filling template, PP need to "Provide sample calculations for all formulae used to calculate baseline GHG emissions or baseline net GHG removals, applying actual values." under Section E.1 of the MR however verification team could not verify the same.				
Project participant response				Date: 12/08/2019
Sample calculation has been provided in the MR				
Documentation provided by project participant				
Monitoring Report				
DOE assessment				Date: 29/08/2019
Correction has been in the revised MR /02/ and found OK. Hence this CAR is closed.				

CAR ID	04	Section no.	E.6.2	Date: 09/08/2019
Description of CAR				
Under the monitoring parameter " $\eta_{new,j}$ " in the section D.2 of the hosted MR /01/, it is mentioned that " The most conservative value among the results of efficiency tests conducted on cook stoves of sizes equal to or smaller than 30 litres capacity have been used for stoves that are larger than 30 litres capacity" which is in compliance with clarification SSC_725. However from the review of the WBT test results /09/, the most conservative value of the efficiency has not considered for IICS serial no. SL0000044.				
Project participant response				Date: 12/08/2019
PP has rectified the mistake and used the lowest thermal efficiency value for IICS serial no. SL0000044.				
Documentation provided by project participant				
General results IICS 30 litres capacity v.02				
DOE assessment				Date: 29/08/2019
Correction has been done in the revised MR /02/ accordingly and found consistent with the WBT results /09/. Hence this CAR is closed.				

CAR ID	05	Section no.	E.6.2	Date: 09/08/2019
Description of CAR				

Under the monitoring parameter “Ny,inst” in the section D.2 of the hosted MR /01/:	
<ol style="list-style-type: none"> 1. The description under the heading “Measured/calculated/default” is missing. 2. The calculated value of the monitoring parameter under heading “Values(s) of monitored parameter” has been checked from the ER sheet /03/ and the formula for calculation for the school “Agro Links Academy Namasuba” was found incorrect. 3. Under the heading “Monitoring equipment”, the description mentioned is not as per the requirement of MR filling template /32/. 	
Project participant response	Date: 27/08/2019
<ol style="list-style-type: none"> 1. PP has amended the MR accordingly to show the calculated value of the monitored parameter. 2. PP has amended the formulae for the calculation of Agro Links Academy Namasuba and the MR accordingly. PP has now included the correct values from the ER calculation spreadsheet. 3. PP has amended the MR accordingly. 	
Documentation provided by project participant	
Monitoring Report Simoshi CER calculation	
DOE assessment	Date: 29/08/2019
<ol style="list-style-type: none"> 1. Correction has been in the revised MR /02/ and found OK. Hence this part of CAR is closed. 2. Correction has been in the revised MR /02/, revised ER sheet /04/ and found OK. Hence this part of CAR is closed. 3. Correction has been in the revised MR /02/ and found OK. No equipment is used for the measurement of the monitoring parameter, hence “Not applicable” is mentioned which is acceptable. Hence this part of CAR is closed. 	

Table 4. FAR from this verificationNo FAR raised during this (1st) verification

FAR ID	xx	Section No.		Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN); • Make structural and editorial improvements.
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: project activities, verifying and certifying		